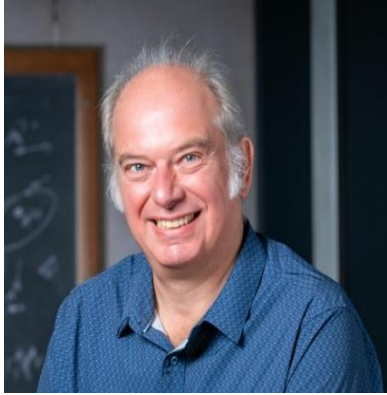




**PL - 01**

**Dr. AXEL HOFFMANN**



Axel Hoffmann received his Diploma in physics from the RWTH Aachen in 1994 and his PhD in physics from the University of California – San Diego in 1999. Subsequently, he worked at the Los Alamos National Laboratory as a postdoctoral fellow. In 2001 he joined the Argonne National Laboratory as a staff scientist and became in 2014 the Senior Group Leader of the Magnetic Thin Film Group within the Materials Science Division. In 2019 he joined the Department of Materials Science and Engineering at the University of Illinois Urbana-Champaign as a Founder Professor. His research interests encompass various magnetism topics, including magnetic heterostructures, spin-transport, and magnetization dynamics. He has more than 200 publications, five book chapters, four magnetism-related U.S. patents, and edited two books. He is a fellow of the American Physical Society, American Vacuum Society, and IEEE. His awards include Distinguished Lecturer for the IEEE Magnetics Society (2011), Outstanding Researcher Award by the Prairie Section of the American Vacuum Society (2015), Highly Cited Researcher by Clarivate (2019–2025), the David Adler Lectureship Award in the Field of Materials Physics from the American Physical Society (2022), and the Research Award by the Alexander von Humboldt Foundation (2024).

**Axel Hoffmann**  
**Professor**

**Department of Materials Science and Engineering and Materials Research Laboratory**  
**University of Illinois Urbana-Champaign, The Granger College of Engineering**  
**Urbana, IL 61801; U.S.A.**

PL - 02

**Dr. JEFFREY McCORD**



Professor Jeffrey McCord is a professor of Nanomagnetic Materials and Magnetic Domains in the Department of Materials Science at the University of Kiel. He began his academic career at the University of Erlangen-Nuremberg, where he earned bachelor's and master's degrees in Materials Science. He then completed a Ph.D. focused on magnetic domain behavior and the application of magnetic thin films. His career bridges advanced industrial development and institutional research. From 1997 to 2001, he worked at the IBM Storage Division in San Jose, California, helping to develop next-generation magnetic recording heads. He then served as a research scientist and group leader at IFW Dresden from 2002 to 2009. He then became Head of the Nanomagnetism Department at the Helmholtz-Zentrum Dresden-Rossendorf. He also co-founded evico magnetics GmbH and served as its managing director. His research focuses on magnetic domains, magnetization dynamics, exchange bias, and nanomagnetism. Recognized as a specialist in magneto-optical microscopy, he seamlessly connects fundamental scientific inquiry with the practical engineering of magnetic devices. Currently, his research at Kiel University focuses on applied physics and sensor technology. He is focusing heavily on developing and optimizing highly sensitive magnetoelectric magnetic field sensors, including surface acoustic wave and delta-E effect sensors, while exploring innovative magneto-optical techniques. He is developing advanced magneto-optical methods for domain imaging and sensing. He engages with the global scientific community by organizing conferences. He played a pivotal organizational role in the INTERMAG 2017 conference in Dublin, Ireland, and he was the general chair of the 2026 International Symposium on Integrated Magnetism (iSIM).

**Jeffrey McCord**  
**Professor of Nanomagnetic Materials and Magnetic Domains**  
**Department of Materials Science**  
**Kiel University**  
**Kiel, Germany**

PL - 03

**Dr. HARI SRIKANTH**



**Hari Srikanth** is a Distinguished University Professor at the University of South Florida. He received his Ph.D. in experimental condensed matter physics from the Indian Institute of Science, Bangalore and has been at USF since 2000 where he leads the Functional Materials Laboratory. He is also the Director of Florida Institute of Emergent Low-Dimensional Quantum Materials (FIELD-QM). Hari's research spans a wide range of topics like quantum materials, magnetic materials and nanoscience. At USF Hari has graduated 25 PhD students and mentored over 15 postdoctoral scholars in his career. He has over 325 journal publications (with 13,700+ citations and an h-index of 67) and has given over 230 invited talks around the world. In 2019, he was an **IEEE Magnetics**

**Society Distinguished Lecturer**. He is a *Fellow of the American Physical Society*, *Fellow of the Institute of Physics* and a *Senior Member of IEEE*. He currently serves as an Associate Editor for *Physical Review B*. Hari has been closely involved with the MMM and INTERMAG conferences for over 20 years serving as Publication Editor, Publication Chair and on program committees. He was the Special Events Chair for the MMM 2025 in Palm Beach, FL and also serves as a voting member on the IEEE Magnetics Society AdCom. Hari is a recipient of an *Alexander von Humboldt Research Award* and a *Fulbright Scholar Award* and holds visiting professorships at University of Duisburg Essen in Germany, IIT Bombay and Indian Institute of Science Bangalore in India.

**Hari Srikanth**  
Distinguished University Professor  
Department of Physics  
University of South Florida  
Tampa, USA

Institute Visiting Professor  
Department of Physics  
Indian Institute of Science  
Bangalore, INDIA

**Dr. S. N. PIRAMANAYAGAM**

S. N. Piramanayagam (Prem) received his Ph.D. from the Indian Institute of Technology Bombay, India, in 1994. He conducted postdoctoral research at Shinshu University, Japan (1995–1999), and subsequently worked at the Data Storage Institute (DSI), A\*STAR, Singapore. He is currently an Associate Professor at Nanyang Technological University (NTU), Singapore. With over 35 years of experience in magnetism, his research has spanned amorphous magnetic alloys, permanent magnetic materials, and thin films and nanostructures for data storage and spintronics applications. His current interests focus on the interdisciplinary areas of magnetism, electronics, and nanotechnology. Prem has received multiple awards for both teaching and research, including the Teaching Excellence Award from NTU and several Outstanding Research Awards from DSI Singapore. He is a Senior Member of IEEE and an active contributor to the IEEE Magnetics Society, where he has served as Chair of the Technical Committee, elected member of the Administrative Committee, Chair of the Singapore Chapter, and Co-Chair of the 2018 INTERMAG Conference in Singapore. He has published over 200 journal papers and filed several patent applications. He is also the co-editor of *Developments in Data Storage: Materials Perspective* (Wiley-IEEE Press, 2011). Prem served as a Distinguished Lecturer of the IEEE Magnetics Society in 2024, delivering his lecture at about 70 venues worldwide.

**S.N. Piramanayagam**  
**Associate Professor**  
**School of Physical and Mathematical Sciences**  
**Nanyang Technological University**  
**Singapore**



**PL - 05**

**Dr. DEL ATKINSON**



Professor Del Atkinson recently finished a 5 year stint as the Head of Condensed Matter Physics in the Department of Physics at Durham University, UK and he was recently an ICC Visiting Professor at IMR, Tohoku in the group of Prof Takeshi Seki. Del Atkinson was appointed full professor in 2014. He was awarded the title ‘Sir Gareth Roberts Professor of Applied Physics’ in April 2017 and is a Fellow of the UK Institute of Physics. Del’s research experience in academia and industry extends over three decades and involves work on magnetics, spintronics, thin-film semiconductors for flexible electronics and pressure-sensitive inks. His primary work is in magnetism where the focus is on understanding the relationship between physical structure and magnetic functionality, which currently includes work on spintronics and microwave properties of magnetic thin-film systems. Del is particularly proud of his supervision of research students and has guided 18 students to successful PhD completion.

**Professor Del Atkinson**  
**Department of Physics**  
**Durham University**  
**Durham, UK**

PL - 06

**Dr. TOMOYASU TANIYAMA**



Tomoyasu Taniyama is a professor in the Department of Physics at Nagoya University. He received his PhD from Keio University in 1997 for his research on the magnetism of transition metal nanoparticles. Prior to joining Nagoya University, he held positions as an assistant professor and associate professor at the Tokyo Institute of Technology. During his time there, he was a JSPS postdoctoral fellow for research abroad at the Cavendish Laboratory at the University of Cambridge. He also worked as a postdoctoral researcher at the National Research Institute for Metals (now the National Institute for Materials Science, NIMS).

Professor Taniyama is at the forefront of spin-related physics and engineering in magnetic nanostructures. His research focuses on novel magnetic properties and spin-polarised electron transport phenomena in magnetic thin films and nanostructures. He is currently exploring the fundamental physics of magnetoelectric coupling in artificial multiferroic heterostructures, which is key to the emerging fields of spintronics and magnonics for low-power electronic applications. His scientific excellence has been recognised through various awards, including the Young Scientist Award from the Japanese Ministry of Education, Culture, Sports, Science and Technology (2005), the Tokyo Tech Challenging Research Award (2009), the International Conference on Ferrites 11 (ICF11) New Products and Technologies Award (2013), the 20th JSPM Distinguished Paper Award (2019) and the Magnetism Society of Japan Outstanding Research Award (2019). He has published over 230 papers in international journals such as Nat. Phys., Adv. Mater., Adv. Sci., NPG Asia Mater., Phys. Rev. Lett., Phys. Rev. X, Phys. Rev. B and Appl. Phys. Lett. He is also currently Director of the Magnetism Society of Japan and Associate Editor of Springer Nature's NPG Asia Materials.

Tomoyasu Taniyama  
Professor  
Department of Physics  
Nagoya University  
Nagoya, Japan

PL - 07

**Dr. KOKI TAKANASHI**



Koki Takanashi received his BS, MS, and Ph.D. degrees in Physics from the University of Tokyo. After postdoctoral research at Tohoku University, he joined the faculty there and became a Professor (2000) and the Director (2014) of the Institute for Materials Research at Tohoku University. In 1994-1995 he was an Alexander von Humboldt Research Fellow at the Forschungszentrum Jülich in Germany. He is now a Professor Emeritus at Tohoku University, and the Director at the Advanced Science Research Center, Japan Atomic Energy Agency. His research interests include magnetism and magneto-transport in nanostructures, magnetic materials for spintronics, and spin current phenomena. Particularly, he is well known as the first researcher to demonstrate the utility of ordered alloys as materials for spintronics. He proposed a perpendicularly magnetized  $L1_0$ -FePt as a perpendicular spin polarizer, and demonstrated the current-induced magnetization switching in a nanopillar-type device in 2006. This is one of pioneering works which applied perpendicular magnetization to spintronics. He also observed a giant spin Hall effect (SHE) of an Au thin film in a lateral-type device with the  $L1_0$ -FePt spin polarizer in 2008, leading to a subsequent search for large SHE materials. Furthermore, he observed current-perpendicular-to-plane giant magnetoresistance (CPP-GMR) of approximately 30 % at room temperature in a nanopillar-type device with  $Co_2MnSi$  electrodes in 2009, before which only the value less than 10 % had been reported. His work was a breakthrough, and CPP-GMR has increased dramatically since then. He has published over 500 original or review papers in internationally reputed journals, has given 90 invited talks at international conferences, and has received numerous awards, including the Outstanding Research Award (2004, Magnetic Society of Japan), Outstanding Paper Award (2009, Japan Society of Applied Physics), Masumoto Hakaru Award (2011, Japan Institute of Metals), MSJ Award (2019, Magnetic Society of Japan), Murakami Memorial Award (2021, Japan Institute of Metals), AUMS Award (2022, Asian Union of Magnetic Societies), and IEEE fellowship (2026). He was the leader of a national project in Japan: “Creation and Control of Spin Current” (2007-2011), and the Distinguished Lecturer of IEEE Magnetics Society (2013). He also served as the President of Magnetics Society of Japan (2017-2019), Asian Union of Magnetics Societies (2018-2019), and Japan Institute of Metals (2020-2021), and as a General Cochair of INTERMAG2023.

**Koki Takanashi**  
**Director**  
**Advanced Science Research Center (ASRC)**  
**Japan Atomic Energy Agency (JAEA)**  
**Tokai, Japan**



**PL - 08**

**Dr. S. M. YUSUF**



Prof. S M Yusuf, currently serves as Director, UM-DAE Centre for Excellence in Basic Sciences (CEBS), J C Bose National Fellow in Bhabha Atomic Research Centre, Mumbai and Senior Professor at both Homi Bhabha National Institute and UM-DAE CEBS. Earlier, he served as Director, Physics Group, BARC, Mumbai and Director, Institute of Physics, Bhubaneswar. He received his PhD from University of Mumbai. He was a post-doctoral fellow at Argonne National Laboratory, USA, and a visiting scientist at the Institute of Materials Science, Spain, and the recipient of U.S. Depart. of Energy Fellowship as well as the Spanish Ministry of Science

& Education Fellowship. He has made outstanding contributions in condensed matter physics and materials science, and published more than 400 original research articles, and obtained several patents. Delivered talks in more than 250 national and international forums in India and abroad. Prof. Yusuf is an elected fellow of all three national science academies, viz. Indian National Science Academy, Indian Academy of Sciences, and National Academy of Sciences, India. He is also an elected fellow of The World Academy of Sciences (TWAS), which is a global science academy based in Trieste, Italy, under UNESCO. Prof Yusuf is also an elected fellow of the Indian National Academy of Engineering (INAE). The President of India honoured Prof. Yusuf the prestigious Rashtriya Vigyan Puraskar - Vigyan Shri Award 2025 of the Government of India in recognition of excellence in Science, Technology, and Innovation. Materials Research Society of India (MRSI) has honoured him with the “Distinguished Materials Scientist of the year award 2025”. He is the recipient of several other recognitions: D. Sc (h.c.), Distinguished Dr. R. Chidambaram Lecture Award from Indian Crystallographic Association, MRSI Distinguished Lecturer Ship Award, P K Iyenger memorial award from Indian Physics Association, Raja Ramanna Prize Lecture in Physics, JNCASR, DAE Homi Bhabha Science & Technology Award, MRSI Materials Science Annual Prize, MRSI Medal DAE SRC outstanding research investigator award, DAE Group Achievement Awards, NS Sathya Murthy Memorial Award of Indian Physics Association, 1st prize in Young Physicist Colloquium from Indian Physical Society. Presently, Prof. Yusuf serves as Vice-President, Materials Research Society of India and Council member of The Association of Asia Pacific Physical Societies (AAPPS). He also served as President of Asia-Oceania Neutron Scattering Association (AONSA), President of Indian Physics Association Council, member of The National Academy of Sciences, India, INSA nominated member of the National Committee for IUCr, Vice-President and Board member of Asia-Oceania Neutron Scattering Association, Vice Chair, Division of Condensed Matter Physics, Association of Asia Pacific Physical Society, President, Neutron Scattering Society of India, Vice-President of Indian Physics Association, Vice President, Indian Crystallographic Association, Member of Neutron Science Review Committee, Oak Ridge National Laboratory, USA for eight years during 2013 – 2021.

**Prof. S. M. Yusuf**  
**Director**  
**UM-DAE Centre for Excellence in Basic Sciences (CEBS)**  
**Bhabha Atomic Research Centre**  
**Mumbai, India**

**PL - 10**

**Dr. P. S. ANIL KUMAR**



Prof. P.S. Anil Kumar is a faculty member at the Department of Physics, Indian Institute of Science, Bangalore. He has more than three decades of research experience in spintronics, magnetic nano-structures, surface and thin film magnetism, magneto-transport in metallic multilayers and oxides, spin-polarized electron scattering. He obtained his M.Sc. and Ph.D. in Physics from the Indian Institute of Technology Madras and subsequently carried out advanced research in experimental condensed matter physics before joining IISc. His research expertise includes magnetic and transport properties of novel materials, heavy fermion systems, quantum phase transitions, and unconventional superconductors using techniques such as magnetization, heat capacity, and electrical transport measurements under extreme conditions. He has authored a large number of research papers in reputed international peer-reviewed journals and has significantly contributed to the understanding of correlated electron materials. He has also supervised several doctoral students and actively contributes to the Indian condensed matter physics research community through collaborations, scientific mentoring, and peer review activities.

**P.S. Anil Kumar**  
**Professor**  
**Department of Physics**  
**Indian Institute of Science, Bangalore**  
**Bangalore, India**

## IL - 01

### Dr. JESUS JAVIER CAMPO RUIZ



Javier Campo (Physicist) made his doctoral thesis in 1995, at the Aragón Materials Science Institute (ICMA), joint research institute between the Spanish National Research Council (CSIC) and the University of Zaragoza, on the magnetism of “*disordered materials and spin glasses*”. Later he moved to the University of Montpellier where he made a post-doctoral stay of 2 years working on the magneto-optical properties of hexagonal GaN wide gap semiconductor. Several of his works were published with whom in 2014 received the Noble Prize in Physics. From 1998 to 2002 Dr. J Campo was appointed by the CSIC as scientist responsible for the CRG-D1B at the Institute Laue Langevin (ILL) in Grenoble (France) and in 2003 he joined the ICMA as a researcher under the prestigious Spanish talent program “Ramón y Cajal” where he continued heading the Spanish CRG at the ILL, including the CRG-D15 and the new XtremeD instruments. He was Director of the ICMA institute (more than 300 staff) from 2012 to 2020. His scientific interest is focused on the study of “*Magnetic Chirality*” and “*Purely organic magnets*” by using neutron scattering techniques and recently he started to work on “*in operando studies of materials for energy applications*” by using also neutron and Xray scattering. Javier Campo is the author of more than 180 scientific papers and main researcher in more than 55 research projects. He has supervised 8 doctoral theses and has held several international membership, among others; Presidency of the Spanish Neutron Scattering Association, vice-presidency of the European Neutron Scattering Association (ENSA), Spanish delegate at the ILL Steering Committee, Chair of the VI European Conference on Neutron Scattering held in Zaragoza, member of the international advisory board of Global Institute for Materials Research Tohoku (Japan), international advisory board of the Dan Benninson Institute of Nuclear Technology (Argentina), member of the Aragon Committee for Science, Technology and innovation, and Chair of the Spanish Committee for Large Scale Scientific Facilities.

Prof. Javier CAMPO  
Aragón Nanoscience and Materials Institute  
Spanish National Research Council (CSIC)

## IL - 02

### Dr. YUYA SAKURABA



Dr. Yuya Sakuraba is a Group Leader of the Magnetic Functional Device Group at the Research Center for Magnetic and Spintronics Materials, National Institute for Materials Science (NIMS), Japan. He received Ph.D. degrees in applied physics from Tohoku University, where he established a strong background in magnetic materials and spin-dependent transport phenomena. After completing his doctoral studies, he subsequently joined the Institute for Materials Research (IMR) at Tohoku University as an Assistant Professor in the Magnetic Materials Laboratory led by Professor Koki Takanashi. In 2013, he moved to NIMS as a Senior Researcher, and since 2018 he has been leading research groups at NIMS in the field of magnetic materials and spintronic devices. In 2022, he became the Group Leader of the Magnetic Functional Device Group. His research interests include spintronic phenomena and materials, with particular emphasis on functional Heusler alloys, as well as thermoelectric effects and their device applications using magnetic materials. In his early research, he demonstrated extremely high spin polarization in half-metallic Heusler alloys by employing tunnel magnetoresistance and giant magnetoresistance devices, achieving exceptionally large magnetoresistance ratios. These results provided strong experimental evidence for the half-metallic electronic structure of Heusler alloys and clarified their potential for advanced spintronic applications. His research has expanded to transverse transport phenomena in magnetic materials, such as the anomalous Hall effect and anomalous Nernst effect. He and his group members have proposed and demonstrated novel sensing devices based on these effects and has contributed to the discovery and exploration of new materials with topological electronic band structures. Through an integrated approach combining material design, thin-film growth, and device physics, his work aims to establish new concepts for energy-efficient sensing and energy-harvesting technologies based on magnetic and spintronic materials.

Yuya Sakuraba  
Group Leader  
Magnetic Functional Device Group  
NIMS  
Tsukuba, Japan

**IL - 03****Dr. ALEXEY V. LUKOYANOV**

Head of laboratory of metal optics at M.N. Mikheev Institute of Metal Physics of Ural Branch of Russian Academy of Sciences, Ekaterinburg, Russia. Part-time at Ural Federal University, Ekaterinburg, Russia. Received PhD in Physics at Ural Federal University in 2007. Visiting scientist at University of Augsburg (Germany) in 2007-2011 and ETH Zürich (Switzerland) in 2004-2007. Award of acad. I.M. Tsidilkovskii award for outstanding work in physics (2013). Head of more than 10 grant projects of Russian Science Foundation and Russian Foundation for Basic Research, including 3 international Indian-Russian projects

cofunded by DST. Research areas: computational materials science, theoretical methods, novel magnetic materials, strongly correlated electron systems. Theoretical methods used to study structural stability and physical properties of materials are based on Density Functional Theory (DFT, DFT+U), Dynamical Mean-Field Theory (DMFT). These first-principles methods were applied to investigate topological materials, materials with metal-insulator transitions, materials with spin and magnetic transitions, magnetocaloric materials, Heusler alloys, non-stoichiometric compounds, nanomaterials, and superconductors. For novel carbides, Heusler alloys, and other transition metal compounds, models accounting for the short-range disorder of atomic arrangements and vacancies in various sublattices were proposed, structural stability, bonding and their electronic, physical, and thermal characteristics were described. Recent developments in machine learning allowed us to include materials datasets to predict and optimize physical properties of magnetic, thermoelectric and other materials. Number of publications: more than 230 scientific articles.

**Alexey V. Lukoyanov,**  
**Head of Laboratory of Metal Optics,**  
**Leading Research Scientist, Prof. Dr.,**  
**M.N. Mikheev Institute of Metal Physics of Ural Branch**  
**of Russian Academy of Sciences (IMP UrB RAS),**  
**Ekaterinburg, Russia**



**IL - 05**

**Dr. VENKATAKRISHNAN KANCHANA**



Prof. V. Kanchana is a Professor in Physics Department at the Indian Institute of Technology Hyderabad, India. She is a computational condensed matter physicist specializing in quantum materials, energy materials, and electronic structure theory. Her research covers topological materials, thermoelectrics, magnetic systems, and materials under extreme conditions, using advanced first-principles methods to predict novel phenomena with strong technological relevance in spintronics, superconductivity, and energy conversion. Before joining IIT Hyderabad, she held research positions as a Guest

Scientist at the Max Planck Institute for Solid State Research, Researcher at the Royal Institute of Technology, Stockholm, Sweden, and Scientific Officer at the Defence Metallurgical Research Laboratory (DMRL-Hyderabad). Prof. Kanchana has received the MRSI Medal (2021), the SMC Bronze Medal (2023), and was elected Fellow of the Institute of Physics (2021). She is also deeply committed to teaching and mentoring.

**Name: Prof. V. Kanchana**

**Designation: Professor**

**Department: Physics**

**Organization Name: IIT Hyderabad**

**City, Country: Hyderabad, India**

**IL - 06****Dr. PRABHU DELHI BABU**

Dr. Prabhu D, is a Scientist at International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI). He has more than two decades of experience in the field of magnetism and magnetic materials. He received his Master's and Ph. D in Physics from University of Madras (2010) and had postdoctoral stints in Indian Institute of Science Bangalore and at National Institute for Materials Science, Tsukuba Japan, thereafter moving to his current position at ARCI. His domain of expertise is in the field of metastable processing of materials, microstructure magnetic property correlation of soft and hard magnetic materials. He has more than 50 paper published in international peer reviewed journals of repute and has filed 5 patents. He serves as an executive member of the Magnetic society of India and a reviewer of international journals of repute. He is the fellow of the Academy of Sciences, Chennai. He is currently leading the rare earth magnet program at ARCI and has established a pilot plant facility for the manufacture of Nd-Fe-B magnets.

**D. Prabhu**  
**Scientist E**  
**Centre for Advanced Powder Metallurgy**  
**International Adv. Res. Centre for Powder Metallurgy and New Mateirals (ARCI)**  
**Hyderabad, India**

**IL - 07**

**PRASANTA CHOWDHURY**



Dr. P. Chowdhury graduated in physics from the University of Burdwan in 1992 and completed his postgraduate studies there in 1995. He obtained his doctorate in physics from the Indian Institute of Technology, Bombay, in 2000. He worked in South Korea as a post-doctorate fellow. Presently, he is a scientist at the National Aerospace Laboratories in India. Since 2006, he has been actively working in spintronics, developing magnetic sensors based on xMR technologies. He worked on several projects sponsored by CSIR, BRNS, DRDO, DST, with industry collaborations. His recent activity developing TMR-based technology on a 6-inch wafer, sponsored by Meity with an industry partner. Other activities include developing products, such as current, speed, and angle sensors for automotive and aerospace applications. He is the author of over 100 publications in international peer-reviewed journals.

**Prasanta Chowdhury**  
**Chief Scientist**  
**Surface Engineering Division**  
**National Aerospace Laboratories**  
**Bangalore, India**



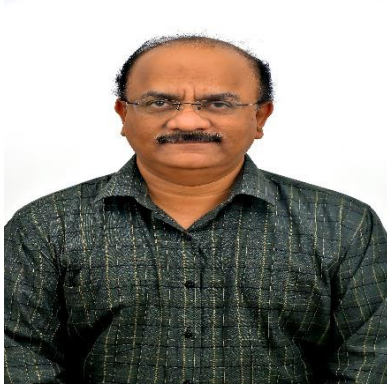
**IL - 08**

**Dr. RABI NARAYAN PANDA**



Prof. Rabi Narayan Panda is working as Associate Professor, Department of Chemistry, BITS Pilani, K K Birla Goa Campus, India, since Feb. 2006. After completing his post-graduation in chemistry from Sambalpur University, Odissa, India, in 1992 he pursued for his Doctoral degree in the area of Solid State Chemistry and Nanomaterials from Dept. of Chemistry, IIT Kanpur, India. After completing of PhD in 1998, Dr. Panda pursued post-doctoral research in few internationally reputed universities and institutes for a total duration of 6.5 years. Dr. Panda is a recipient of Alexander von Humboldt Fellowship during 2003-2004. His area of research are interdisciplinary in nature and are closely related to nano-materials synthesis, processing and magnetic properties study. Dr. Panda is Life Member for several professional societies including Magnetics Society of India(MSI) and Indian Institute of Metal (IIM), Goa Chapter. Prof. Panda has authored 54 publications, 39 referred conferences, 7 book chapters and 1 editorial to his credit. He has nearly 1840 citations with h-index 20. His current research focuses are on Metal/Alloys, Ferrites, Bio-materials, Nitride, Semiconductor Nanocrystal etc. PhD supervision: 4 (2 Completed and 2 ongoing). Dr. Panda played Principal Investigator role in two sponsored (DST and CSIR, India) research projects.

**Rabi Narayan panda**  
**Associate Professor**  
**Department of Chemistry**  
**Birla Institute of technology and Science, Pilani- KK Birla Goa campus**  
**Goa, India**

**IL - 09****Dr. G. S. VAITHEESWARAN**

Dr. Ganapathy Subramanian Vaitheeswaran is a Professor at the School of Physics, University of Hyderabad, and an internationally recognized researcher in theoretical solid-state physics. His research, centered on the magnetism of complex materials, has significantly advanced the frontiers of computational physics and materials science. Over the course of an illustrious career, Dr. Vaitheeswaran has earned numerous prestigious honors, including the DAE Young Achiever Award (2012), the B.M. Birla Science Prize in Physics (2013), the Chancellor's Award for Excellence in Teaching and Research (2014), and the Materials Research Society of India Medal (2019), Fellow Institute of Physics London (2025), Fellow Royal Society of Chemistry (2025). These accolades reflect both his groundbreaking research contributions and his commitment to academic excellence. He has held esteemed postdoctoral positions at leading global institutions, including the Max Planck Institute for Solid State Research in Stuttgart, Germany, and the Royal Institute of Technology in Sweden, further strengthening his international research profile. With more than 195 peer-reviewed publications, over 6100 citations, and an h-index of 39, Dr. Vaitheeswaran's work continues to influence and inspire the scientific community worldwide. His contributions to computational and condensed matter physics stand as a testament to his enduring impact on the field..

**G Vaitheeswaran**  
**Professor**  
**School of Physics**  
**University of Hyderabad**  
**Telangana, India**

**IL - 11****Dr. HIROYUKI NAKAMURA**

Hiroyuki Nakamura is a professor in the Magnetism and Magnetic Materials Laboratory in the Department of Materials Science and Engineering at Kyoto University in Japan. He graduated from Faculty of Engineering, Kyoto University in 1985 and completed the Master's program at Graduate School of Engineering, Kyoto University in 1987, earning a Master of Engineering degree. The title of the thesis was "Spin fluctuations and thermal expansion in pseudobinary compounds of  $YMn_2$ ". From 1987 to 1989, he was enrolled in the Graduate School of Engineering Science at Osaka University. He earned his Doctor of Science degree in 1994 with a dissertation titled "Nuclear magnetic resonance study of antiferromagnetic heavy fermion system  $UCu_5$ ". In 1988, he was a research fellow of Japan Society for the Promotion of Science. From 1989 to 1990, he was a research associate at Faculty of Engineering Science, Osaka University, and from 1990 to 2002, at Faculty of Engineering, Kyoto University. He subsequently served as an associate professor at Graduate School of Material Science, University of Hyogo. He has held his current position since 2007. His research focuses on magnetism and magnetic materials. His interests and achievements include searching for new materials that exhibit novel quantum phenomena; the effects of geometric frustration in metallic magnets; quantum magnetism in strongly correlated electron systems; and the fundamental study of permanent magnets, particularly ferrite magnets. Recent publications from his group can be found at <https://magma.mtl.kyoto-u.ac.jp/PublicSite/publication.html>

**Hiroyuki Nakamura**  
**Professor**  
**Department of Materials Science and Engineering**  
**Kyoto University**  
**Kyoto, Japan**



## IL - 12

### Dr. SUBHANKAR BEDANTA



Prof. Subhankar Bedanta is a Professor in Physics and Chief-Coordinator for center for Interdisciplinary Sciences (CIS) at National Institute of Science Education and Research (NISER, Bhubaneswar). Dr. Subhankar Bedanta is a Professor (since 2022) at the School of Physics, NISER-Bhubaneswar, where he has been a faculty member since 2010. He earned his Ph.D. in 2006 from the University of Duisburg-Essen, Germany, followed by postdoctoral research at both his alma mater and Princeton University. Over the last decade, he has also held several international visiting positions, including Visiting

Associate Professor at Tohoku University, Japan, and Visiting Scientist roles at University Paris-Saclay (France), University of Białystok (Poland), National Institute for Materials Science (NIMS, Japan), Forschungszentrum Jülich (Germany), and Durham University (UK), among others. His core expertise lies in nanomagnetism and spintronics, specifically focusing on domain imaging and dynamics. His recent work explores cutting-edge frontiers such as Organic and flexible spintronics, Antiferromagnetic spintronics and Antiferromagnetic spintronics. With over 125 publications and 4,200 citations, his influence is substantial. Notably, his review on “Supermagnetism” has garnered approximately 1,200 citations, marking it as a seminal text in the field. Dr. Bedanta’s excellence is recognized by several accolades, including the 2015 Young Scientist Award (Odisha Physical Society) and the 2019 DAE Young Achiever Award. He is a prolific speaker with over 100 invited talks, including a panelist role at the 2020 VAIBHAV Summit. He is a Senior Member of the IEEE Magnetics Society and serves on its Educational Committee (EdCom) and Technical Committee. He is also on the Advisory Editorial Board of the Journal of Magnetism and Magnetic Materials (JMMM). Additionally, he serves as Associate Editor for the Journal of Superconductivity and Novel Magnetism, Frontiers in Physics, and Frontiers in Nanotechnology.

**Dr. Subhankar Bedanta**  
**Professor**  
**School of Physics**  
**NISER-Bhubaneswar**  
**Odisha, India**

**IL - 13****Dr. V. SUBRAMANIAN**

Dr. V. Subramanian is a senior physicist and Professor in the Department of Physics at the Indian Institute of Technology Madras with several decades of experience in the field of microwave physics, dielectric materials, semiconductors, and multifunctional materials research. He obtained his Ph.D. from IIT Madras and has since established an active research program focused on microwave materials and devices, photonic crystals, metamaterials, multiferroics, magnetoelectric materials, electromagnetic interference shielding, and near-field microwave microscopy. His work significantly contributes to the understanding and development of advanced functional materials for electronic and photonic applications. He has authored numerous research papers in reputed international peer-reviewed journals and has guided several Ph.D. scholars in the areas of condensed matter and microwave materials physics. He is also actively involved in collaborative research and academic mentoring within the Indian materials and applied physics research community.

**V. Subramanian**  
**Professor**  
**Department of Physics**  
**Indian Institute of Technology-Madras**  
**Chennai, India**

**Dr. SANDEEP KUMAR SRIVASTAVA**



Dr. Srivastava is working as an Associate Professor at the Department of Physics, CIT Kokrajhar (a Deemed-to-be University under MoE, Gov. of India ). Moreover, he is serving the institute as "Dean (Research and Development). Dr. Srivastava received his M.Sc. (Physics) degrees from DDU Gorakhpur University and, earned his PhD in Physics from IIT Guwahati in 2009 under the guidance of Prof. S. Ravi. Afterwards, he spent more than five years abroad as a postdoctoral scientist, first at the Institut Neel, CNRS, Grenoble, France (with Prof. Bernard Barbara and Dr. Georges Bouzerar), and then at the Catholic University of Louvain, Belgium (with Prof. Luc Piraux) and National Taiwan University. He is a passionate researcher with a strong interest in carrying out research work in the area of material science with a special emphasis on developing novel nanostructured magnetic materials. Over the past 21 years, he developed adequate research interest in the areas such as 'Rare Earth Free Permanent Magnets', 'Magnetic Recording Media', '2D Magnetoelectronic Materials' and; 'Spintronics Materials' in the form of thin films of magnetic multilayers or alloys, and nanoparticles. He received five sponsored research projects worth 1 crore 30 Lakhs from funding agencies like DST-SERB, CSIR, and UGC-DAE-CSR. He has already supervised 8 PhD students and eight master's theses. Curently, he is supervising five PhD in his group. He published his research work in 84 reputed journals (mostly Q1 and Q2). He is serving as an Editorial Board Member of journals such as 'Scientific Reports, Discover Materials. He has delivered more than 20 invited talks at national and international conferences in India and abroad. He is the recipient of the "SERB Early Career Research Award 2016" and "Emerging Researcher Award 2019". Additionally, he has been included among the "World's Top 2% Scientists" in 2024 and 2025.

**Dr. Sandeep Kumar Srivastava**  
**Associate Professor**  
**Physics**  
**Central Institute of Technology Kokrajhar**  
**Kokrajhar, India**

**IL - 15**

**Dr. ANNAPOORNI SUBRAMANIAN**



Dr. Annapoorni Subramanian is a Senior Professor in the Department of Physics & Astrophysics at the University of Delhi with more than three decades of experience in condensed matter physics, magnetic materials, nanostructured systems, and functional materials research. She received her B.Sc. and M.Sc. degrees in Physics from Madurai Kamaraj University and obtained her PhD from the Indian Institute of Technology Madras with research focused on the magnetic and electrical behaviour of hydrogenated rare-earth transition-metal systems. She carried out postdoctoral and research assignments at the Indian Institute of Technology Madras and the National Physical Laboratory, where she worked on magnetostrictive materials, conducting polymers, and advanced functional materials. Her research expertise spans magnetic thin films, nanomaterials, multiferroics, spintronic materials, plasmonics, semiconductor oxides, photocatalytic materials, and magnetic anisotropy in metallic systems. She has published extensively in reputed international peer-reviewed journals and has supervised several doctoral students in the areas of nanoscience and condensed matter physics. She has also actively contributed to national and international conferences through invited talks, scientific mentoring, and collaborative research activities in advanced materials physics.

**V. Subramanian**  
**Professor**  
**Department of Physics and Astrophysics**  
**University of Delhi**  
**Delhi, India**

## IL - 16

### Dr. RAMANATHAN MAHENDIRAN



Prof. R. Mahendiran received PhD in Physics from the Indian Institute of Science, Bangalore in 1997. His outstanding work on colossal magnetoresistance in oxides earned him Toulse medal for the best thesis from IISc in 1997. Before joining NUS in 2005, he was a post-doctoral fellow at institutions in multiple countries (Spain, France, USA, and Japan) from 1997 to 2004. He was a recipient of NUS Young Researcher Award in 2007.

He served as a co-chair of the spintronics group at NUSNNI, NUS (2006-2015). He has 190 peer-reviewed publications and over 6000 citations (H-index of 41). His current research focuses on microwave synthesis of oxides, MW magnetotransport, spin-charge-heat conversion, magnetostriction, magnetoelectrics, and magnetocaloric effect.

**Rmanathan Mahendiran**  
**Associate Professor**  
**Physics Department**  
**National University of Singapore**  
**Singapore, Singapore**

## IL - 17

### Dr. TAKAYUKI ISHIBASHI



Prof. Takayuki Ishibashi is professor of Department of Materials Science and Bioengineering, Nagaoka University of Technology. His research as doctoral student of Tsukuba University was preparation and characterization of high-T<sub>c</sub> superconducting thin films using molecular beam epitaxy method. Since 1995, he has served as an assistant professor at Tokyo University of Agriculture and Technology, where he studied magnetic materials and magneto-optical (MO) measurement techniques. During this time, he also developed thin film preparation techniques called the metal-organic decomposition method. After becoming an associate professor at Nagaoka University of Technology in 2007, he has conducted research on high-quality magnetic oxide thin films such as bismuth-substituted magnetic garnet thin films and yttrium manganese oxide thin films. In addition to fundamental research on magnetic materials and their MO properties, he has also conducted researches on magnetic imaging techniques for visualizing magnetic fields, magnetization vector measurement techniques, and MO spectroscopy techniques. Recently, he has found all-optical magnetization switching phenomena in bismuth-substituted iron garnet thin films, in which magnetization can be switched by femtosecond laser pulses. Furthermore he has successfully developed an optical neural network device that utilizes the light diffraction and phase modulation due to the MO effect to achieve high-speed, low-power neural network calculations.

Takayuki Ishibashi  
Professor  
Department of Materials Science and Bioengineering  
Nagaoka University of Technology  
Niigata, Japan

IL - 18

**Prof. BHASKAR MAJUMDAR**



**Dr. Bhaskar Majumdar** is a distinguished metallurgical scientist and technology leader with extensive experience in defence and industrial research. His academic credential includes: B.E (Metallurgical Engineering) from Regional Engineering Collage (NIT), Durgapur, followed by doctoral degree from the department of Metallurgy, Indian Institute of Science, Bangalore and post doctoral fellowship from Technical University of Clausthal, Germany.

Dr. Majumdar's is currently serving as Vice President at Kalyani Centre for Technology & Innovation, the R&D of Bharat Forge Ltd., Pune, where he is contributing to the advanced materials, deep technologies, and innovation-driven product development. Prior to his industry role, he had a long and impactful career at Defence Metallurgical Research Laboratory, DRDO, Hyderabad. There, he was spearheading two research projects, namely development of 1) nanocrystalline ultra-soft magnetic alloys, used for precision control of energy supply resulting in gaining a substantial energy losses in missiles or allied defence systems, and 2) futuristic W alloys, made of Nano-Tungsten Heavy Alloy / Tungsten-Bulk Metallic Glass composite rods with enhanced Depth of Penetration of Kinetic energy penetrators. In between, he served as a professor on Deputation at Defence Institute of Advanced Technology, a Deemed University at Pune under the aegis of Ministry of Defence, Govt of India, where he was involved in teaching and guiding several M.Tech and PhD students.

Dr. Majumdar's research works have been colated and published in different peer-reviewed journals and Indian patents. His name has also been enlisted as worldwide top 2% scientist in Materials, published in Elsevier BV by Stanford University Rankings for consecutively 2020 to 2025. With a strong blend of academic excellence, research leadership, and industry experience, Dr. Majumdar continues to play a key role in bridging defence research and industrial innovation in advanced manufacturing and materials engineering.

**Dr. Bhaskar Majumdar**  
Vice President  
Kalyani Centre for Technology & Innovation  
R&D of Bharat Forge Ltd.  
Pune – 411 036. INDIA  
Mobile: +91 9490749833

**Dr. JASNAMOL PEZHUMKATTIL PALAKKAL**

I am an assistant professor in Complex Thin Film Systems/Advanced Epitaxy at the Institute of Materials Physics, Georg-August University of Göttingen, Göttingen, Germany. I am an Indian born scientist who moved to Germany in 2018 after my PhD for postdoctoral studies and further career advancement. My PhD research was done at CSIR-NIIST, Trivandrum, under the supervision of Dr. Manoj R. Varma, and the doctoral degree was awarded by AcSIR. After four years of postdoctoral research at the Technical University of Darmstadt, Germany, I moved to the

University of Göttingen as an assistant professor in 2022.

My research group focuses on synthesizing functional materials for data and energy applications by taking **magnetism** as a core topic and **catalysis/ferroelectrics/photovoltaics** as a subtopic. I have experience in synthesizing a wide variety of materials in bulk and thin-film form. We work with various physical vapor deposition techniques such as **Hybrid Molecular Beam Epitaxy-Pulsed Laser Deposition (MBE-PLD)** and ion-beam sputtering. Currently, we are actively working on several projects based on materials: transition-metal-doped **ZnO**, anion-modified double perovskites **La<sub>2</sub>NiMn(ON)<sub>6</sub>** and single perovskites **SrNb(ON)<sub>3+δ</sub>**, chalcogenides **Cr<sub>(1+δ)</sub>Te<sub>2</sub>**, and various novel **high-entropy** chalcogenides.

I have led/have been leading different independent projects funded by the German Research Foundation (Deutsche Forschungsgemeinschaft - DFG) and the Ministry for Science and Culture of Lower Saxony (MWK), Germany. I have authored 30+ peer-reviewed publications and actively contribute(d) to Collaborative research centres (CRC 1633 as a project investigator, CRC 1073/1487, CRC/TRR 270 as an associate member). I am a regular reviewer for leading journals and a co-organizer of scientific symposia, including the DPG 2024 Spring Meeting in Berlin, Germany, session on Renewable Energy Materials.

**Jasnamol Palakkal**  
**Assistant Professor**  
**Institute of Materials Physics/Faculty of Physics**  
**University of Göttingen**  
**37077 Göttingen, Germany**

IL - 20

**Dr. MADHURI WUPPULLURI**



Dr. Madhuri Wuppulluri is a Professor of Physics and Director, Centre for Functional Materials at Vellore Institute of Technology, Vellore. Prof. Madhuri has completed her M.Tech in Computer Science and Engineering and Ph. D. in solid state physics from Sri Krishnadevaraya University, Anantapur, Andhra Pradesh under the guidance of Late Prof. K V Siva Kumar. She has joined Department of Physics at the Vellore Institute of Technology, Vellore as Assistant Professor in 2009. She is been gradually promoted to the present position.

Dr Madhuri has nearly 26 years of teaching and research experience. She is the **First Indian recipient of Eleonore-Trefftz** Guest Professor Fellowship, Technical University, Dresden, Germany. She is the life member of Magnetic Society of India, Materials Research Society of India, Member of ACS and APS. She has awarded 10 Ph.Ds and guided more than 40 Master's students. She has nearly 100+ peer reviewed international journal publications, 6 patents, 5 Book chapters to her credit. She has successfully completed many national and international funded projects.

Her research interests include magnetic ceramics, magnetic alloys, ferroelectrics, and multifunctional composites intended for energy conversion and electromagnetic shielding applications. Her research focuses on merging machine learning and materials science to forecast material properties, optimise compositions, and speedup the discovery of high-performance functional materials.

**Madhuri W  
Professor and Director  
Centre for Functional Materials  
Vellore Institute of Technology  
Vellore – 632014.  
Tamil Nadu  
India.**



**IL - 21**

**Dr. S. SRINATH**



Dr. S. Srinath is working as a Professor in School of Physics, University of Hyderabad, India. He received his Bachelor's and Master's degree in Physics from Osmania University and M.Phil., Ph.D. from University of Hyderabad. Dr. Srinath has worked as Scientist "SD" in Institute for Plasma Research (IPR), Gujarat in 2001. Dr. Srinath worked as a post-doctoral fellow at Argonne National laboratory, U. S. A. (2002-2004) and University of South Florida (2004-2006) before joining School of Physics, University of Hyderabad in 2006 as an Assistant Professor and is a full Professor in the School of

Physics, University of Hyderabad since 2016.

**Academic and Research Achievements:** Prof. S. Srinath is an Experimental Condensed Matter Physicist. He has guided 7 and co-supervised 4 Ph.D. students, mentored 4 post-docs. Research interests include Phase transitions, critical phenomena, magneto-electric coupling, magnetization reversal, exchange bias, magnetic anisotropy, Magnetocaloric effect, transport and magneto-transport properties of Multiferroics, Spintronics and Nanomaterials. He has published more than 140 papers in journals of international repute with the h-index of 35, i-10 index of 67 and total citations of more than 3700.

**Other Contributions:** Dr. Srinath is serving as Chairman of University Cryogenics committee. He was also Director of IQAC, University of Hyderabad during 2020-2022. Dr. Srinath has delivered talks at several National and International Conferences. Dr. Srinath is a life member of Indian Physics Association, Neutron Scattering Society of America, Magnetics Society of India, Indian Cryogenics Society, K.V. Rao Scientific Society and Indian Physics Teachers Association. He is serving as a Referee for several International Physics Journals.

**Awards and Honors:** Elected as Fellow of Telangana Academy of Sciences (2016), BOS member of several Physics departments.

**S.Srinath**  
**Professor**  
**School of Physics**  
**University of Hyderabad**  
**Hyderabad, Telangana, India**

IL - 22

**Dr. SHINJI ISOGAMI**



Dr. Shinji Isogami received his B.Sc. and M.Sc. degrees in Applied Physics from Tohoku University and obtained his Ph.D. in Electronic Engineering from Tohoku University in 2007, after which he continued there as a postdoctoral researcher. From 2010 to 2016, he served as an Associate Professor at Fukushima National College of Technology. Since 2017, he has been a Senior Researcher at the Research Center for Magnetic and Spintronic Materials, National Institute for Materials Science (NIMS), where he leads the development of highly efficient magnetization-switching materials based on borides, carbides, and nitrides.

Dr. Isogami has led domestic and international research aimed at creating practical spintronic materials by moving beyond conventional substitutional metal-element strategies and instead focusing on interstitial light elements, particularly nitrogen, and their site occupancy and chemical bonding with metallic elements to induce novel functionalities. In Fe<sub>4</sub>N thin films, he achieved the world's highest negative tunnel magnetoresistance ratio and demonstrated key advances, including inverse current-induced magnetization switching and magnetic logic circuits. More recently, he has expanded his research to carbon- and boron-based systems, exploring mechanisms of emergent device functionalities at the electronic-structure level. His contributions have been recognized with the Outstanding Research Award from the Magnetics Society of Japan, among more than ten other honors.

Based on these studies, he has coined the term “Nitrospinics” to describe a research direction aimed at realizing emergent spintronic devices through  $p-d$  orbital hybridization between nitrogen and transition metals. This concept highlights the active role of interstitial nitrogen in modifying electronic structures, spin polarization, and spin-orbit-related phenomena. Recent examples include two-dimensional Cr<sub>2</sub>N-based spin-orbit torque (SOT) devices and advanced HDD media incorporating VN layers that enable orbital-torque generation. These results demonstrate that nitrogen-induced orbital effects can significantly improve magnetization switching efficiency and device performance.

Shinji Isogami, Dr.  
Principal Researcher  
Section Research Center for Magnetic and Spintronic Materials (CMSM)  
Magnetic Recording Materials Gr. (MRMG)  
National Institute for Materials Science (NIMS)  
Tsukuba, JAPAN

## IL - 23

### Dr. HIMANSHU FULARA



Dr. Himanshu Fulara is an Assistant Professor in the Department of Physics at IIT Roorkee, India. Prior to joining IIT Roorkee, he gained five years of international research experience as a Senior Researcher and Postdoctoral Scholar at the University of Gothenburg in Sweden, and as a Postdoctoral Fellow at the Max Planck Institute for Microstructure Physics in Halle, Germany. He earned his Ph. D. in Physics from the Thin Film Laboratory at IIT Delhi. Dr. Fulara's research focuses on Applied Spintronics & Nanomagnetism, with particular emphasis on spintronic nano-oscillators, brain-inspired and spin-wave computing, magnetic skyrmions, and exchange-biased ultra-thin magnetic films. His work bridges fundamental spin-wave dynamics with emerging device concepts for energy-efficient neuromorphic computing and high-frequency microwave technologies. He currently serves on the Editorial Board of Scientific Reports (Nature Portfolio) and has authored over 30 peer-reviewed research articles, including notable contributions to high-impact Nature and Science family journals. Dr. Fulara has delivered more than 50 conference presentations worldwide and has been invited to speak at leading international conferences and workshops.

**Himanshu Fulara**  
**Assistant Professor**  
**Department of Physics**  
**Indian Institute of Technology Roorkee**  
**Roorkee- 247667, INDIA**

IL - 24

**Dr. ANIL KUMAR SINGH**



Dr. Anil Kumar Singh is a Professor in the Department of Physics and Astronomy at the National Institute of Technology, Rourkela, Odisha, India since July 2024. His academic journey began with a Masters degree in Physics from Banaras Hindu University in 2005, followed by a Ph.D. from Jawaharlal Nehru University, New Delhi, in 2011. He also had a stint as a Visiting Fellow at the Tata Institute of Fundamental Research, Mumbai for one year.

His research focuses on Experimental Condensed Matter Physics, Material Science, and Low-temperature Physics. He is particularly interested in synthesizing multiferroic materials, studying magneto-electric coupling, and exploring their applications in photovoltaic solar cells, sensors, and memory devices. Over the years, he had received several awards and honors, including the Best Thesis Award at the 56th DAE Solid State Physics Symposium in 2011 and the Senior Research Fellow (CSIR) from 2009-2011.

He had published 75 research papers in reputed journals and have delivered various invited talks at various conferences. He is also a life member of several professional organizations, including the Indian Association of Physics Teachers and the Indian Science Congress Association, Magnetics Society of India, Neutron Scattering Society of India (NSSI). He had guided 8 Ph.D. students. He believes in fostering a collaborative research environment and have worked with students and colleagues from diverse backgrounds.

Outside of academia, I'm a firm believer in the importance of science outreach and popularization. He enjoy sharing his passion for physics with students and the general public, and he have been involved in several initiatives to promote science education and awareness.

**Anil Kumar Singh**  
**Professor**  
**Department of Physics and Astronomy**  
**National Institute of Technology Rourkela**  
**Odisha, 769008 India**



**IL - 25**

**Dr. JYOTI PRASAD BORAH**



Dr. Jyoti Prasad Borah is presently an Associate Professor in the Department of Science and Humanities (Physics), National Institute of Technology Nagaland, India. He has completed his PhD from Gauhati University, Assam, India. He has over 100 Publications. Dr. Jyoti Prasad Borah has completed Four external funded research project and Five project is ongoing. His research interest lies in Metal ferrite based nanoparticles and nanocomposite for Magnetic hyperthermia application, Rare earth free materials for Permanent magnet application Dilute Magnetic Semiconductor (Oxide Semiconductor) and carbon nanotube and ferrite nanoparticles for photocatalytic and biomedical application.

**Dr. Jyoti Prasad Borahe**  
**Associate professor**  
**Department of Science and Humanities**  
**NIT Nagaland**  
**Chumukedima, Nagaland**



**IL - 26**

**Dr. CHANDANA RATH**



Dr. (Mrs.) Chandana Rath is Professor in School of Materials Science and Technology, Indian Institute of Technology (BHU) Varanasi, India. Presently she is Associate Dean, Faculty Affairs of IIT(BHU). She was a post-doctoral fellow at the Department of Physics, University of Girona, Spain for 2 years. She has published 130 papers in reputed international journals in the areas of nanomagnetism, nanostructured materials, dilute magnetic semiconductors, bioglass composites and ion irradiation. She has six patents. Sixteen students have already awarded PhD Degree and 7 are presently working under her. She has been sanctioned projects from various external agencies like UGC, DST and UGC-DAE-CSR, SERB, ANRF of India and NFFA, Europe. She has delivered more than 100 invited talks in national and international conferences.

She has received MRSI Medal Award from Materials Research Society of India in 2015 and Best Poster award in IUMRS-ICA during her PhD. She has received Women achiever in STEM in 2021. She has been nominated as a Council member of MRSI, India from 2019-2026.

**Dr. (Mrs.) Chandana Rath**  
**Professor**  
**Associate Dean Faculty Affairs**  
**School of Materials Science and Technology,**  
**Indian Institute of Technology (BHU)**

**Dr. VARIMALLA RAGHAVENDRA REDDY**



M.Sc. and Ph.D. from Osmania University, Hyderabad, Telangana, India.

Working in the area of magnetism and magnetic materials for the last 25 years. Main research interests include multiferroic materials, magnetic thin films/multilayers, Mossbauer spectroscopy and magneto-optical Kerr effect. As per the mandate of parent institute, established various state-of-the-art in-house experimental facilities in the area of condensed matter physics, with some of them such as low temperature high magnetic field (LTHM) Mossbauer spectroscopy, are unique in our country. With the help of in-house LTHM Mössbauer system, explored sub-lattice magnetization, spin-canting, super-paramagnetic fluctuations, magnetic phase co-existence, de-vitrification of the kinetically arrested magnetic state, transferred hyperfine field, critical exponents, spin reorientation transition, magnetic compensation, site-disorder, low/high spin transitions, spin-flop transition, lattice vibrations, high temperature superconductors, hyperfine interactions across dielectric maxima in lead-free relaxors etc., unambiguously.

Published about 250 publications with an h-index of 40 and i10 index of 184. Guided 12 Ph.D. students, about 30 Masters project students and mentored two post-docs.

**Elected as Fellow of The National Academy of Sciences (FNASc), India; Fellow of Institute of Physics, IOP, London, UK (FInstP); Fellow of Telangana Academy of Sciences, Hyderabad, India (FTASc).**

Awarded Materials Research Society of India (MRSI) Medal for the significant contributions to the field of Materials Science and Engineering.

Elected as Member, International Board on the Applications of Mössbauer effect (IBAME).

Life Member of Magnetism Society of India (MSI), Materials Research Society of India (MRSI), Indian Society for Radiation Physics (ISRP).

**Dr. Varimalla Raghavendra Reddy**  
**Scientist - H**  
**UGC-DAE Consortium for Scientific Reserach**  
**Khandwa Road, University Campus**  
**Indore, India - 452001**

IL - 28

**Dr. VASUDHARA MUTTA**



Dr. **Vasundhara Mutta** is a materials scientist, currently serving as **Scientist-F at the CSIR-Indian Institute of Chemical Technology** and as a Professor at the Academy of Scientific and Innovative Research, Hyderabad. Born in Kharagpur, she completed her B.Sc. (Physics Honours) and M.Sc. (Physics, specializing in Solid State Physics) from Vidyasagar University, and earned her Ph.D. in Experimental Condensed Matter Physics from Indian Institute of Technology Kharagpur. Dr. Mutta gained extensive international research experience through prestigious postdoctoral fellowships at the Korea Advanced

Institute of Science and Technology as a B2K Fellow, and later at the Technical University of Denmark (formerly Risø National Laboratory). She subsequently served as a Scientist at CSIR-National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram, for over seven years before joining CSIR-IICT in 2020.

Her research focuses on advanced functional materials for energy, spintronics and biomedical applications, with particular emphasis on magnetocaloric materials for magnetic refrigeration technologies, a promising eco-friendly solution addressing global climate and energy challenges.

An accomplished researcher and scientific leader, Dr. Mutta has published around 150 peer-reviewed articles in high-impact international journals, delivered over 100 invited talks, and served as a reviewer for numerous leading international journals. She has supervised 5 Ph.D., 5 M.Tech./M.Phil., and 25 M.Sc. students, thereby contributing significantly to the development of the next generation of scientists. She is currently leading several R&D projects as Principal Investigator, funded by different national and international agencies.

Her excellence has been recognized through several prestigious honors, including **Fellow of the Telangana Academy of Sciences (2024)**, the **SERB POWER Fellowship (DST, India)**, the **BK21 (Brain Korea 21) Postdoctoral Fellowship (South Korea)**, and the **European Space Agency Postdoctoral Fellowship (awarded in Denmark)**. She is also an active **life member of several prominent national and international scientific societies**

Vasundhara Mutta  
Scientist F  
Department of Polymers and Functional Materials  
CSIR-Indian Institute of Chemical Technology  
Hyderabad, Telangana, India

**Dr. KAZUNARI YAMAURA**

Kazunari Yamaura, Ph.D., is Group Leader of the Quantum Solid State Materials Group at the International Center for Materials Nanoarchitectonics (WPI-MANA), National Institute for Materials Science (NIMS), Tsukuba, Japan. He received his Doctor of Science in Chemistry from Kyoto University in 1997. His academic career has included research appointments in Japan and the United States, including Princeton University and Oak Ridge National Laboratory, before assuming leadership roles at NIMS. He also serves as Guest Professor at Hokkaido University and contributes actively to national and international scientific

communities.

Dr. Yamaura's research focuses on the discovery and development of novel solid-state materials, particularly transition-metal oxides and complex inorganic compounds exhibiting correlated electronic and magnetic phenomena. His work integrates advanced high-pressure and high-temperature synthesis, single-crystal growth, crystallographic analysis, and comprehensive measurements of magnetic, electronic, and transport properties. By systematically controlling crystal chemistry, including cation and anion ordering and lattice distortions, his group elucidates structure–property relationships that underpin emergent phenomena such as anomalous Hall effects, exchange bias, metal–insulator transitions, and unconventional magnetism.

According to ORCID (0000-0003-0390-8244), Dr. Yamaura has authored more than 300 peer-reviewed publications, including papers in leading journals such as Nature family journals, Physical Review Letters, and the Journal of the American Chemical Society. His research is highly collaborative and interdisciplinary, contributing to the advancement of materials nanoarchitectonics and enabling future technologies in spintronics, non-volatile memory, magnetic sensing, and micro-energy conversion. In parallel with his research activities, he is committed to mentoring young scientists through graduate education and international research programs.

**Kazunari Yamaura, Ph.D.**  
**Group Leader, Quantum Solid State Materials Group**  
**International Center for Materials Nanoarchitectonics (WPI-MANA)**  
**National Institute for Materials Science (NIMS)**  
**Tsukuba, Ibaraki, Japan**



IL - 30

**Dr. CHANDRASEKHAR MURAPAKA**



Chandrasekhar Murapaka is currently working as an Associate Professor in the Department of Materials science and Metallurgical Engineering at IIT Hyderabad. He has obtained his Masters of Technology degree from IIT Delhi and Doctoral degree from Nanyang Technological University (NTU) Singapore. His research interests are focused on Spintronic Materails and Devices. Prior to joining IIT Hyderabad, he has spent two years at Spintec, CEA Grenoble, France as a Research Engineer under Enhanced Eurotalents fellowship. He also worked as a senior engineer at Globalfoundries Singapore as Thin film process engineer. He has received gold medal for best PhD thesis in Physics in 2015 from Materials Research Society (MRS) Singapore. He has participated in Global Young Scientist Summit in 2013. Till date, he has published 88 articles in peer reviewed journals and has 3 US patents, 1 Singapore patent and 7 Indian patents granted and 5 more Indian patents are filed. He have contributed 3 book chapters. He has graduated four PhD students till date. He has received Teaching excellence award from IIT Hydearabad in 2024. He has been elevated to IEEE Senior Member in 2025.

Chandrasekhar Murapaka

Associate Professor

Department of Materials Science and Metallurgical Engineering

Indian Institute of Technology Hyderabad

India

## IL - 31

### Dr. ARABINDA HALDAR



Arabinda serves as a Professor in the Department of Physics at IIT Hyderabad, having joined as an Assistant Professor in 2016. He earned his MSc-PhD Dual Degree in Physics from IIT Bombay in 2011. Prior to his current position, Arabinda completed a four-year postdoctoral fellowship at the National University of Singapore and Colorado State University in Fort Collins, USA. He also worked as a Scientist-C at the S. N. Bose National Centre in Kolkata, India.

His research group, the ‘Magnonics Lab’, focuses on spin dynamics in magnetic thin films and nanostructures, utilizing advanced spin wave spectro-microscopy techniques including micro-focused Brillouin light scattering. Arabinda has co-authored over 90 publications, including two book chapters and three invited reviews, and holds two US patents and four Indian patents.

He is a member of the Editorial Board for the journals Scientific Reports and Materials Today Electronics. Throughout his career, he has received several accolades, such as the IIT Hyderabad Research Excellence Award in 2024, the Guest Researcher honor from NIMS-Japan in 2024, and recognition as an IEEE Senior Member in 2022. Additionally, he was awarded the Young Scientist Research Award from BRNS in 2021, the Early Career Research Award from ANRF in 2018, and the Ramanujan Fellowship from ANRF in 2017.

Arabinda Haldar  
Professor  
Department of Physics  
IIT Hyderabad  
Kandi 502284, Telangana, India

**IL - 33**

**Dr. BARID BARAN LAHIRI**



Dr. B. B. Lahiri is working as a scientific officer-F, and leading the Functional Nanomaterials Section, Physical Metallurgy Division, Metallurgy and Materials Group, IGCAR, Kalpakkam. He joined the Functional Nanomaterials Section in the year 2010, after graduating from the 53<sup>rd</sup> batch of the BARC Training School, Mumbai. He works on magnetic nanoparticles, magnetic nanofluids or ferrofluids and nano-composites with the primary aim of harnessing industrial and societal benefits. The research activities encompass optimizing magneto-structural, thermal, and colloidal properties of nanoparticles and nano-composites for various directed applications. He has set-up a magnetic fluid hyperthermia research facility at IGCAR, Kalpakkam and regularly collaborates with various educational institutes. Over the last 16 years, Dr. Lahiri has co-authored 68 peer-reviewed journal papers & 5 book chapters accumulating a total citation count of 4967, an i-10 index of 47, and an h-index of 27. He is a regular reviewer of several reputed international journals such as, J. Magn. Mater., Phys. Scripta, Ceram. Intl., Scientific Reports, and IOP Nanotechnol. He is a recipient of the DAE Young Applied Scientist Award in 2014, and DAE Solid State Physics Young Achiever Award in 2022.

**B. B. Lahiri**  
**Scientific Officer-F**  
**Head, Functional Nanomaterials Section**  
**Physical Metallurgy Division**  
**Metallurgy and Materials Group**  
**Indira Gandhi Centre for Atomic Research, Kalpakkam**  
**Tamil Nadu, PIN 603102**  
**India**

**Dr. I. PANNEER MUTHUSELVAM**



He completed his Master's degree from the School of Physics, Madurai Kamaraj University, and his M.Phil in specialisation with Materials Science, Department of Materials Science, Madurai Kamaraj University. He received a Ph.D. from the Department of Physics, Pondicherry University. Thereafter, he worked as a Post-doctoral researcher at National Taiwan University and Academia Sinica from Oct 2012 to April 4th, 2017. Meanwhile, he received an award from DST as a DST-INSPIRE Faculty, then returned to India and joined the Central University of Tamil Nadu as a DST-INSPIRE Faculty from April 2017 to July 2020.

Then, he worked as an Assistant Professor at Banaras Hindu University from July 2020 to June 2025. Now he is working as an Associate Professor, Dept of Physics and Astrophysics, University of Delhi, since June 27, 2025.

His research focuses on the discovery of novel materials exhibiting unusual physical properties, including geometrically frustrated magnetism with quantum spin behavior, multiferroicity, orbital ordering, topological insulators, superconductivity, Dirac semimetals, Weyl semimetals, and metal-insulator transitions. His approach involves growing single crystals of these materials and investigating them using X-ray scattering, low-temperature and high-magnetic-field measurements, and transport property analyses.

He has published 54+ papers in reputed international journals, including 14 in Physical Review B (PRB), with a strong citation profile and notable H-index. He has also received ~₹1.4 crore in research funding through 4 sponsored projects supported by DST-INSPIRE, Banaras Hindu University Seed Grant, UGC-DAE CSR, and Anusandhan National Research Foundation (ANRF).

**Dr. I.Panneer Muthuselvam**  
**Associate Professor**  
**Department of Physics and Astrophysics**  
**University of Delhi**  
**Delhi, India**

IL - 35

**Dr. HIMALAY BASUMATARY**



**Dr. Himalay Basumatary** received M.Sc. degree in Physics from Gauhati University, Guwahati and M.Tech. in Solid State Technology from Indian Institute of Technology (IIT) Kharagpur. He did his Ph.D. degree in Materials Engineering from Indian Institute of Science (IISc), Bangalore. He is currently working as Scientist-F in the Advanced Magnetics Group, DMRL, Hyderabad. His area of research interest includes magnetism and metallurgy of magnetostrictive Rare Earth-Iron and Iron-Gallium alloys, Nd-Fe-B permanent magnets, both in bulk and thin film forms. Currently he is involved in development of magnetic field sensors based on spintronic thin films and development of high power and high temperature grade Nd-

Fe-B magnets through pressless sintering route.

**Dr. Himalay Basumatary**  
Scientist-F  
Advanced Magnetics Group  
Defence Metallurgical Research Laboratory (DMRL), DRDO  
Hyderabad, India

IL - 36

**Dr. VENKATAIAH GORIGE**



Dr. Venkataiah Gorige is a Professor in the School of Physics at the University of Hyderabad, India, with over 18 years of research and teaching experience. He earned his PhD from Osmania University, specializing in the structural, magnetic, and electrical properties of manganite-based materials. He has held several positions, including postdoctoral fellowships in (JSPS) Japan and Taiwan, and a Senior Research Associate position at the Indian Institute of Science, Bangalore. His academic journey reflects strong international exposure and sustained contributions to condensed matter physics. His research focuses on ferromagnetic/ferroelectric heterostructures, manganites, ferrites, and multiferroic materials, particularly exploring magnetoelectric coupling, spin-wave dynamics, and electric-field control of magnetism for low-power device applications. Dr. Gorige has published 44 research articles with over 1600 citations and an h-index of 22, demonstrating the significant impact of his work. He has led several funded research projects as Principal Investigator, supported by national and international agencies such as DST, SERB, CSIR, ANRF, and JST (Japan). Dr. Gorige has received several awards, including the Young Scientist Award and multiple Best Poster Awards, along with prestigious fellowships like the JSPS Postdoctoral Fellowship. He has supervised PhD scholars, delivered over 100 invited lectures, and organized international conferences such as ICFAST-2022. In addition to his research, he actively contributes to academic and administrative activities, reflecting his commitment to excellence in both research and academic leadership.

Venkataiah Gorige  
Professor  
School of Physics  
University of Hyderabad  
Hyderabad, Telangana, India

## IL - 37

### Dr. ROHIT MEDWAL



Dr. Rohit Medwal is an Assistant Professor in the Department of Physics at IIT Kanpur, where he has been serving since April 2022. He earned his Ph.D. from the University of Delhi in 2013, for which he received the prestigious Anil K. Bharti Bhatnagar Award for the best doctoral thesis in Solid State Physics from the Indian Physics Association. Prior to joining IIT Kanpur, he held postdoctoral positions at Kyushu Institute of Technology (Japan), University of Puerto Rico (USA), and Nanyang Technological University (NTU), Singapore. His research spans nanomagnetism and magnetization dynamics, spin transport technologies, terahertz spintronics, quantum spin-photonics, spin textures, and operando electron nanoscopy. He has authored over 108 peer-reviewed journal publications and delivered 37 invited talks at national and international forums. He has organized several prestigious events, including the School on Magnetism and Spintronics at IIT Kanpur (2024). His interdisciplinary contributions to spintronic device physics — from ultrafast spin dynamics to neuromorphic computing with magnetic vortices — make him a leading figure in the magnetism and spintronics community.

**Dr. RAVI GAUTAM**



Dr. Ravi Gautam is an Assistant Professor in the Department of Metallurgical and Materials Engineering at Malaviya National Institute of Technology (MNIT) Jaipur, India. He received his B.Tech in Metallurgical and Materials Engineering from the National Institute of Technology (NIT) Tiruchirappalli in 2012 and completed his Integrated MS and Ph.D. in Metallurgical and Materials Engineering from the Indian Institute of Technology (IIT) Madras in 2021. His doctoral research focused on understanding the process–microstructure–magnetic property correlation in Fe–P based soft magnetic alloys for automotive applications.

After a brief tenure at the Defence Metallurgical Research Laboratory (DMRL), DRDO, Hyderabad (2012-2013), he joined the International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), Chennai, where he worked as a Scientist from 2013 to 2022 on the development of indigenous magnetic materials and magnetic devices for industrial and automotive applications. His research at ARCI emphasized magnetic material processing, microstructure optimization, and technology development for energy-efficient systems. In 2022, he joined the National Institute for Materials Science (NIMS), Japan, as a Post-Doctoral Researcher in the Green Magnetic Materials Group, where he worked on high-performance nanocrystalline soft magnetic materials, spin caloritronic materials, and energy-efficient magnetic systems for next-generation power electronics and heat-flux applications.

Dr. Gautam’s research interests include soft and hard magnetic materials, spin caloritronics, advanced microstructure characterization, and magneto-structural engineering of functional magnetic materials. His work primarily focuses on tailoring magnetic properties through a fundamental understanding of process–microstructure–property relationships and translating these insights into advanced magnetic technologies. He has authored 17 international journal publications and holds four patents, including one granted patent. His research contributions have been recognized through several awards, including the NIMS President Award for Innovation Research (2025). He has also delivered invited talks at international conferences and actively contributes to interdisciplinary research in magnetic materials and sustainable energy technologies.

Dr. Ravi Gautam  
Assistant Professor  
Metallurgical and Materials Engineering  
Malaviya National Institute of Technology Jaipur  
Rajasthan, INDIA

IL - 39

**Dr. ANUJ KUMAR**



Dr. Anuj Kumar is an Assistant Professor in the Department of Electronics & Communication Engineering (ECE) and the Centre for Quantum Technologies (CQT) at Indraprastha Institute of Information Technology Delhi (IIIT-Delhi).

Dr. Kumar received his Ph.D. from the Indian Institute of Technology Roorkee (IITR) in 2021. He was awarded the Excellence in Doctoral Research Award for his Ph.D. thesis work. After his Ph.D., he was an Institute of Eminence (IoE) Postdoctoral Fellow at the Indian Institute of Science (IISc) Bangalore for one year, and later a Postdoctoral Research Fellow at the National University of Singapore (NUS), Singapore, for three years (2022–2025). He is a lifetime member of the Indian Physics Association and served as Joint Secretary of the Indian Physics Association, Roorkee Chapter, during his Ph.D. tenure. In recognition of his mentorship, he received the NUS High Inspiring Mentor Award (2024).

His research lies at the intersection of spintronics, nanoelectronics, and neuromorphic engineering. He integrates device physics, nanofabrication, and advanced experimental characterization with micromagnetic simulations and data-driven modeling. His work targets next-generation memory, magnetic sensing, and compute-in-memory technologies. He collaborates closely with interdisciplinary teams spanning nanofabrication, magnetism, materials science, and AI hardware.

**Dr. Anuj Kumar**  
**Assistant Professor**  
**Department of Electronics & Communications Engineering**  
**Centre for Quantum Technology**  
**Indraprastha Institute of Information Technology Delhi (IIITD)**  
**New Delhi, India**